

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended): A control apparatus for an automotive vehicle, comprising:

a continuously variable transmission associated with a vehicular engine, including a belt that transmits a revolution of a primary pulley to a secondary pulley, and that is enabled to make a gear shift by modifying a pulley ratio between the primary and secondary pulleys with a hydraulic;

a belt slip determining section that determines, when the vehicle is moving, if a slip of the belt between at least one of the primary and the secondary pulleys ~~occurs~~ when the vehicle is moving; and the belt occurs; and

an output section that outputs a signal to command an engine control unit to increase an engine idling speed by a predetermined engine speed when the vehicle stops moving, wherein the output section outputs the signal when the belt slip determining section determines that the slip therebetween occurs.

2. (Canceled).

3. (Previously Presented): A control apparatus for an automotive vehicle as claimed in claim 1, wherein the vehicle further comprises:

an oil pump to be driven by means of the engine;

an original hydraulic supplying section that supplies an original hydraulic for a control hydraulic that controls the pulley ratio with the oil pump as a hydraulic source;

a gear shift actuator that supplies the control hydraulic to each pulley;

a gear shift controlling section that outputs a control command to the gear shift actuator; and

an original hydraulic determining section that determines whether a pressure of the original hydraulic of the original pressure supplying section is equal to or below a predetermined hydraulic pressure value;

wherein the gear shift controlling section outputs the control command to command the engine control unit to increase the engine idling speed by the predetermined engine speed when the original pressure during the vehicle stop is determined to be equal to or below the predetermined hydraulic pressure value by the original hydraulic determining section.

4. (Original): A control apparatus for an automotive vehicle as claimed in claim 3, wherein the gear shift controlling section outputs a signal indicating a demand on an output torque upper limit value to the engine control unit when outputting the signal to command the engine control unit to increase the engine idling speed by the predetermined engine speed.

5. (Previously Presented): A control apparatus for an automotive vehicle comprising:

- a continuously variable transmission associated with a vehicular engine, including a belt that transmits a revolution of a primary pulley to a secondary pulley, and that is enabled to make a gear shift by modifying a pulley ratio between the primary and secondary pulleys with a hydraulic;

- a belt slip determining section that determines if a slip of the belt between at least one of the primary and the secondary pulleys occurs; and

- an output section that outputs a signal to command an engine control unit to increase an engine speed by a predetermined engine speed when the belt slip determining section determines that the slip therebetween occurs,

wherein the belt slip determining section comprises:

- an engine speed determining section that determines whether the engine speed N_e is larger than a first predetermined engine speed N_{e1} ;

- a secondary pulley cylinder hydraulic determining section that determines if a difference ($P^*_{sec} - P_1$) between a target secondary pulley hydraulic P^*_{sec} and a first set hydraulic P_1 is larger than a second set hydraulic P_0 when the engine speed N_e is higher than the first predetermined engine speed N_{e1} ;

- a setting value setting section that sets a setting value P_{min} to determine if a deviation between the target cylinder secondary hydraulic P^*_{sec} and actual secondary pulley hydraulic P_{sec} is too large;

- a first secondary pulley hydraulic determining section that determines whether a difference ($P^*_{sec} - P_{sec}$) between the target secondary pulley hydraulic P^*_{sec} and actual secondary pulley hydraulic P_{sec} is larger than the setting value P_{min} ;

- a second secondary pulley hydraulic determining section that determines whether the second secondary pulley hydraulic is smaller than a first set hydraulic (P_1) when the difference between the target secondary pulley hydraulic $P^*_{sec} - P_{sec}$ is larger than the setting value P_{min} ; and

- a pulley ratio determining section that determines whether a ratio of revolution speeds between the primary pulley and secondary pulley is larger than a predetermined gear ratio G_0 when P_{sec} is smaller than first set hydraulic P_1 , and

wherein the belt slip determining section determines that the belt slip occurs when the ratio of the revolution speed is larger than the predetermined gear ratio.

6. (Previously Presented): A control apparatus for an automotive vehicle as claimed in claim 5, wherein the output section comprises an overdrive determining section that determines whether an overdrive ratio occurs and the output section outputs different values of torque limitation demand values T_1 and T_2 depending on whether the overdrive ratio occurs.

7. (Original): A control apparatus for an automotive vehicle as claimed in claim 6, wherein the output section outputs one of the torque limitation demand values T_1 and T_2 in which $T_1 > T_2$ depending on whether the overdrive occurs.

8. (Original): A control apparatus for an automotive vehicle as claimed in claim 7, wherein after the output section outputs the engine speed increase demand signal to the engine control unit and, then, outputs a fuel cut-off recovery engine speed increase signal to the engine control unit and, when, during the deceleration, the engine speed is increased.

9. (Previously Presented): A control apparatus for an automotive vehicle as claimed in claim 8, wherein the belt slip determining section determines whether the vehicle is stopped and determines whether a line pressure is larger than a predetermined line pressure when the vehicle is determined to be stopped to determine whether the belt slip occurs.

10. (Canceled):

11. (Currently Amended): A control method for an automotive vehicle, the vehicle comprising: a continuously variable transmission associated with an engine and including a belt that transmits a revolution of a primary pulley to a secondary pulley that is enabled to make a gear shift by modifying a pulley ratio between the primary and secondary pulleys with a hydraulic, and the method comprising the steps of:

ascertaining whether the vehicle is moving; and

if the vehicle is moving:

(a) determining if a belt slip between at least one of the primary and the secondary pulleys and the belt occurs; and

(b) if belt slip occurs, outputting a signal to command an engine control unit to increase an engine idling speed by a predetermined engine speed when the vehicle stops moving.

12. (Previously Presented): A control apparatus for an automotive vehicle, comprising:

- an engine control unit;
- an oil pump, which serves as a hydraulic source, driven by an engine;
- a continuously variable transmission associated with the vehicular engine, the continuously variable transmission comprising:
 - a primary pulley;
 - a secondary pulley; and
 - a belt that transmits a revolution of the primary pulley to the secondary pulley, wherein the belt is enabled to make a gear shift by modifying a pulley ratio between the primary and secondary pulleys with the hydraulic;
- a hydraulic supplying section that supplies an original hydraulic and a control hydraulic to the primary and secondary pulleys to control the pulley ratio;
- an original hydraulic detecting section that detects a hydraulic pressure of the original hydraulic;
- a hydraulic pressure determining section that is configured to determine whether a pressure of the original hydraulic of the hydraulic supplying section is equal to or below a predetermined hydraulic pressure when an engine idling is carried out during a vehicular stop on the basis of the hydraulic pressure of the original hydraulic detected by the original hydraulic detecting section; and
- an output section that outputs a signal to command the engine control unit to increase the engine idling speed by a predetermined engine speed.